

What is claimed is:

1. A method for synchronizing data in a local database with data in a central database, wherein the local database and the central database are each capable of having been changed independently of any synchronization of the local and central databases, said local database contained on a client device, said central database contained on a central computer, the method comprising the steps of:

5 establishing a communication path between said local database and said central database through a server;

10 transmitting data over said communication path to a receiving location; and, synchronizing said transmitted data with a database contained at said receiving location.

15 2. The method of claim 1 wherein said step of establishing a communication path comprises establishes a communication link over a wireless communication network.

20 3. The method of claim 1 wherein said step of establishing a communication path comprises establishes a communication link over a wired message-based communication network.

4. The method of claim 1 further comprising a full synchronization operation being performed wherein said local database is said database contained at said receiving location; and wherein said transmitted data comprises data on the central computer pertaining to the local database.

25 5. The method of claim 4 wherein the client device contains a transaction queue, the method comprising the step of verifying that no entries are present in said transaction queue before said transmitting and said synchronization steps are performed.

30 6. The method of claim 1 wherein the client device contains a transaction queue, the method further comprising a transaction synchronization operation being performed

wherein said central database is said database contained at said receiving location; and  
wherein said transmitted data comprises data present in the transaction queue.

7. The method of claim 6 wherein the method further comprises the steps of:  
5 initiating a background synchronization request by a user; and,  
once initiated, requesting active participation by the user only if an error condition  
requires it.

8. The method of claim 6 further comprising the steps of:  
10 maintaining a temporary client primary key value for entries in said transaction  
queue; and,  
replacing said temporary client primary key value with a server primary key value  
during said transaction synchronization operation.

15 9. The method of claim 1 further comprising the step of loading run-time software  
components onto both said central computer and said client device, said run-time  
software components capable of performing said synchronization step.

10. The method of claim 9 further comprising the steps of:  
20 generating application programs capable of offline processing functions, and  
further capable of utilizing said run-time software components; and,  
loading said application programs onto both said central computer and said client  
device.

25 11. A data storage medium comprising indicia of instruction for a processor to  
perform a method for synchronizing data in a local database with data in a central  
database, wherein the local database and the central database are each capable of having  
been changed independently of any synchronization of the local and central databases,  
said local database contained on a client device, said central database contained on a  
30 central computer, the method comprising the steps of:

establishing a communication path between said local database and said central database through a server;

transmitting data over said communication path to a receiving location; and,

synchronizing said transmitted data with a database contained at said receiving

5 location.

12. The medium of claim 11 wherein said step of establishing a communication path comprises establishes a communication link over a wireless communication network.

10 13. The medium of claim 11 wherein said step of establishing a communication path comprises establishes a communication link over a wired message-based communication network.

14. The medium of claim 11 further comprising a full synchronization operation  
15 being performed wherein said local database is said database contained at said receiving location; and wherein said transmitted data comprises data on the central computer pertaining to the local database.

15. The medium of claim 14 wherein the client device contains a transaction queue,  
20 the method comprising the step of verifying that no entries are present in said transaction queue before said transmitting and said synchronization steps are performed.

16. The medium claim 11 wherein the client device contains a transaction queue, the  
method further comprising a transaction synchronization operation being performed  
25 wherein said central database is said database contained at said receiving location; and  
wherein said transmitted data comprises data present in the transaction queue.

17. The medium of claim 16 wherein the method further comprises the steps of:  
initiating a background synchronization request by a user; and,  
30 once initiated, requesting active participation by the user only if an error condition  
requires it.

18. The medium of claim 16 further comprising the steps of:
  - 5 maintaining a temporary client primary key value for entries in said transaction queue; and,
  - replacing said temporary client primary key value with a server primary key value during said transaction synchronization operation.
19. The medium of claim 11 further comprising the step of loading run-time software components onto both said central computer and said client device, said run-time software components capable of performing said synchronization step.
20. The medium of claim 19 further comprising the steps of:
  - 15 generating application programs capable of offline processing functions, and further capable of utilizing said run-time software components; and,
  - loading said application programs onto both said central computer and said client device.